PRE-ALGEBRA PRACTICE TEST 2

Name_____ **Date**_____

Directions: Complete as many problems as you can in the 30 minutes allotted to you. No calculators!

1. Writes 3.75% as a reduced fraction.

(A) $\frac{3}{80}$ **(B)** $\frac{3}{8}$ **(C)** $\frac{1}{25}$ **(D)** $\frac{1}{30}$ **(E)** $\frac{1}{32}$

2. A shark that is $12\frac{1}{9}$ feet long is how much longer than a shark that is $8\frac{1}{8}$ feet long?

(A) $3\frac{1}{72}$ feet **(B)** $3\frac{17}{72}$ feet **(C)** $3\frac{71}{72}$ feet **(D)** $4\frac{1}{72}$ feet **(E)** $4\frac{71}{72}$ feet

3. Find the value of $\frac{(797-8)+(781+8)+(1189-400)+(589+200)}{4}$.

(A) 787 **(B)** 787.5 **(C)** 788 **(D)** 788.5 **(E)** 789

4. If a circle has a radius of 368 feet, what is the length of the diameter?

(A) 184 feet **(B)** 736 feet **(C)** 738 feet **(D)** 746 feet **(E)** 748 feet

5. Which set of fractions are increasing in value from left to right ?

(A) $\frac{1}{6},\frac{7}{48},\frac{1}{7}$ **(B)** $\frac{1}{7},\frac{1}{6},\frac{7}{48}$ **(C)** $\frac{1}{7},\frac{7}{48},\frac{1}{6}$ **(D)** $\frac{7}{48},\frac{1}{7},\frac{1}{6}$ **(E)** $\frac{7}{48},\frac{1}{6},\frac{1}{7}$

6. Which has the largest sum?

(A) $517\frac{4}{13}+498\frac{5}{13}$ **(B)** $517\frac{2}{13}+498\frac{9}{13}$ **(C)** $517\frac{5}{13}+498\frac{5}{13}$ **(D)** $517\frac{2}{13}+498\frac{6}{13}$ **(E)** $517\frac{1}{13}+498\frac{11}{13}$

7. After changing each mixed number to an improper fraction, which would produce an improper fraction that would have the smallest numerator?

(A) $867\frac{14}{29}$ **(B)** $867\frac{15}{28}$ **(C)** $867\frac{16}{27}$ **(D)** $867\frac{17}{26}$ **(E)** $867\frac{18}{25}$

8. If the price of gasoline increased from \$.85 per gallon to \$1.90 per gallon in 3 years, how much more would it cost to purchase 12.4 gallons of gasoline now compared to 3 years ago?

(A) \$1.76 **(B)** \$12.92 **(C)** \$13.02 **(D)** \$13.20 **(E)** \$130.20

9. What fraction is equivalent to 684.375?

(A) $684\frac{3}{8}$ **(B)** $684\frac{5}{16}$ **(C)** $684\frac{7}{22}$ **(D)** $684\frac{9}{32}$ **(E)** $684\frac{21}{64}$

10. After changing each improper fraction to a mixed number that contains a reduced proper fraction, which fraction will have the largest numerator?

(A) $\frac{7653}{87}$ **(B)** $\frac{7655}{87}$ **(C)** $\frac{7657}{87}$ **(D)** $\frac{7659}{87}$ **(E)** $\frac{7661}{87}$

11. If $\frac{1}{7}$ of the football team could not play due to being academically ineligible and another $\frac{1}{8}$ of the team could not play due to health reasons, what fraction of the team could still play?

(A) $\frac{13}{15}$ **(B)** $\frac{15}{56}$ **(C)** $\frac{39}{56}$ **(D)** $\frac{41}{56}$ **(E)** $\frac{55}{56}$

12. The trip is exactly 36 miles long, and you have traveled four-tenths of it. How much of the trip still remains?

(A) 11.6 miles **(B)** 14.4 miles **(C)** 21.6 miles **(D)** 22.4 miles **(E)** 22.6 miles

13. $\frac{r}{p}\div\frac{s}{q}$ is equivalent to which of the following?

(A) $\frac{p}{r}\times\frac{s}{q}$ **(B)** $\frac{p}{r}\div\frac{s}{q}$ **(C)** $\frac{r}{p}\times\frac{s}{q}$ **(D)** $\frac{r}{s}\times\frac{p}{q}$ **(E)** $\frac{r}{p}\times\frac{q}{s}$

14. A pool that can hold 30,000 gallons of water when full is currently five-sixths full. If you add 2,000 gallons, what fraction of the pool remains empty?

(A) $\frac{1}{6}$ **(B)** $\frac{1}{8}$ **(C)** $\frac{1}{9}$ **(D)** $\frac{1}{10}$ **(E)** $\frac{9}{10}$

15. When writing 71,004 in expanded notation as $(7\cdot 10{,}000)+(1\cdot 1{,}000)+(a\cdot 100)+(b\cdot 10)+(4\cdot 1)$, what is the value of $a+b+746\frac{137}{222}$?

(A) 0 **(B)** $746\frac{137}{222}$ **(C)** $747\frac{137}{222}$ **(D)** $748\frac{137}{222}$ **(E)** $856\frac{137}{222}$

16. A runner came in second place with a time of 1 hour, 1 minute, and 24 seconds. If the first place runner finished 2 minutes and 37 seconds earlier, what was the time of the first place runner?

(A) 1hr. 4min. 1 sec. **(B)** 98min. 87sec. **(C)** 59 min. 47 sec. **(D)** 58min. 59sec. **(E)** 58 min. 47sec.

17. If the dimensions of one room are 12ft x 12ft x 8ft, and the dimensions of a second room are 18ft x 18ft x 24ft, what is the ratio of the volume of the second room to the volume of the first room?

(A) $\frac{4}{27}$ **(B)** $\frac{27}{4}$ **(C)** $\frac{27}{8}$ **(D)** $\frac{8}{27}$ **(E)** $\frac{27}{5}$

18. Twenty people ride the roller coaster every two minutes. How many minutes will it take for 1200 people to ride the roller coaster?

(A) 2 **(B)** 50 **(C)** 60 **(D)** 120 **(E)** 200

19. If it takes 8 minutes to walk home from school and you walk for 5 minutes 18 seconds, how many minutes do you have left to walk?

(A) $3\frac{7}{10}$ **(B)** $2\frac{4}{5}$ **(C)** $2\frac{21}{50}$ **(D)** $2\frac{41}{50}$ **(E)** $2\frac{7}{10}$

20. Which has the smallest value?

(A) $\frac{1}{6}$ of 60 **(B)** $\frac{1}{4}$ of 44 **(C)** $\frac{1}{7}$ of 63 **(D)** $\frac{1}{5}$ of 55 **(E)** $\frac{1}{9}$ of 72

21. Which is the largest number?

(A) −17.1 **(B)** −17.09 **(C)** −17.11 **(D)** −17.009 **(E)** −17.13

22. 800% of what number is 20?

(A) 0.04 **(B)** 0.4 **(C)** 2.5 **(D)** 25 **(E)** 160

23. Find the value of x expressed in $6(4+5)=x\cdot 4+6\cdot y$.

(A) 4 **(B)** 5 **(C)** 6 **(D)** 10 **(E)** 24

24. Solve $8(x-2)=24$.

(A) 1 **(B)** 3 **(C)** 5 **(D)** 6 **(E)** 18

25. Simplify $4+2[3+2\times 4]$.

(A) 22 **(B)** 26 **(C)** 44 **(D)** 66 **(E)** 120

PRE-ALGEBRA TEST 2 ANSWERS

1. A	2. C	3. E	4. B	5. C
6. E	7. E	8. C	9. A	10. B
11. D	12. C	13. E	14. D	15. B
16. E	17. B	18. D	19. E	20. E
21. D	22. C	23. C	24. C	25. B